

REMARKS

The Office Action dated April 16, 2004 has been reviewed and carefully considered. Claims 10 and 11 have been added. Claims 1-11 are now pending, the independent claims being 1, 6 and 7. Claims 6 and 7 have been amended. Claim 1 has not been amended. Reconsideration of the above-identified application, as amended and in view of the following remarks, is respectfully requested.

Claim 7 stands rejected to under 37 CFR 1.75 as a substantial duplicate of claim 4. This rejection is now moot, in view of the amendment of claim 7 which finds support in the specification (e.g., page 3, lines 32-33; page 4, lines 17-19) and in original claim 7.

Claims 1, 2 and 4-9 stand rejected under 35 U.S.C. 103(a) as unpatentable over U.S. Patent No. 5,796,875 to Read in view of U.S. Patent No. 6,236,764 to Zhou.

Claim 1 recites:

said filtering step being applied to at least one pixel component of a selected segment of consecutive pixels located on a single line or column of the current picture and on both sides of a boundary between two blocks, so that the boundary divides the segment into two parts, wherein said filtering step is applied only if the pixels at the ends of said segment have chrominance components that agree with a similarity criterion, wherein said filtering step is applied only if the two pixels at the ends of a part of said segment have luminance components that agree with a similarity criterion

Item 5 of the Office Action identifies "said segment" as consisting of the two pixels "B" and "C" of FIG. 3 of Read. Therefore, "a part of said segment" in claim 1 of the present invention would presumably correspond to one of the two pixels. Since claim 1 refers to "the two pixels at the ends of a part of said segment," it is accordingly unclear what an "end" of a pixel is.

In attempted explanation, item 6 of the Office Action suggests that “C is at the end of the right part, and B is at the end of the left part.”

It is unclear, firstly, what the Office Action means by the “right part” or the “left part.” Since claim 1 refers to “a part of said segment,” the Office Action would presumably be referring to the “right part” of “said segment” and the “left part” of “said segment.” The Office Action has, however, as mentioned above, already identified “said segment” as consisting merely of the Read pixels B and C in FIG. 3 (see Office Action, item 6, page 3, last sentence: “. . . pixels B and C are at the ends of the segment.”) Consequently, the right part of said segment is pixel B and the left part of said segment is pixel C. It is accordingly unclear what the Office Action deems to be “the two pixels at the ends of a part of said segment,” at least because it is unclear what is meant by an “end” of a pixel.

The Office Action seems to rely on some kind of almost unbelievable abstraction that construes a “left part” of a 2-pixel segment to include more than a pixel. A much more believable, and the only reasonable, interpretation is that the left part of a 2-pixel segment consists of the one pixel on the left-hand side.

The Office Action cannot properly be referring to just the two pixels B and C when it refers to a segment, as explained by the analysis above.

It is therefore at least conceivable that we will see yet another Office Action rejecting claim 1, this time proposing that the “said segment” actually corresponds to Read pixels A, B, C and D.

Problematically, however, claim 1 of the present invention recites “said filtering step is applied only if the pixels at the ends of said segment have chrominance

components that agree with a similarity criterion.” Since “the ends of said segment,” i.e., the segment consisting of pixels A, B, C and D, are pixels A and D, item 6 of the Office Action is, in effect, suggesting that the Read filtering step is applied only if pixels A and D have chrominance components that agree. Those two pixels, A and D, however, are pixels merely used to implement the filtering (col. 4, lines 5-17). Pixels A and D are not compared. Nor do pixels A and D have chrominance components that are compared to a similarity criterion. In particular, Read fails to disclose, suggest or feature:

said filtering step being applied to at least one pixel component of a selected segment of consecutive pixels located on a single line or column of the current picture and on both sides of a boundary between two blocks, so that the boundary divides the segment into two parts, wherein said filtering step is applied only if the pixels at the ends of said segment have chrominance components that agree with a similarity criterion, wherein said filtering step is applied only if the two pixels at the ends of a part of said segment have luminance components that agree with a similarity criterion

as explicitly required by the language of claim 1.

Zhou relates to reducing the blockiness in an image, but cannot compensate for the shortcomings in Read.

For at least these reasons, the applied prior art references fail to render obvious the invention as recited in claim 1. Reconsideration and withdrawal of the rejection is respectfully requested.

Claim 6, as it appeared in the most-recent Office Action reply, distinguishes over the prior art of record for at least the same reasons as does claim 1.

Nevertheless, claim 6 has now been amended to emphasize another aspect of the invention. Claim 6 now recites:

A device for decoding data corresponding to a sequence of pictures previously divided into blocks and coded, comprising means for decoding the coded data and means for filtering a selected segment of at least three consecutive pixels located on a single line or column of the current picture and on both sides of a boundary between two blocks, so that the boundary divides the segment into two parts, wherein the device also comprises switching means for replacing said filtering means by a direct connection if the two pixels at the ends of said segment have chrominance components that do not agree with a similarity criterion

As set forth above in the previous section, Read, under the comparison limitations of claim 1, can, at best, be interpreted as disclosing or suggesting a selected segment of merely two pixels. Since claim 6 is an apparatus claim corresponding to method claim 1, the same reasoning applies to claim 6.

By contrast, claim 6 specifies “a selected segment of at least three consecutive pixels.”

Once again, Zhou fails to make up for the shortcomings of Read.

For at least these reasons, the applied references fail to render obvious the invention as recited in claim 6.

Claim 7 has likewise been amended to recite “at least three consecutive pixels,” and is therefore patentable over the applied references.

As to the other rejected claims, each depends from a base claim and is patentable at least due to its dependency although each warrants further consideration based on its individual, additional merits. For example, claim 4 refers to “the two pixels at the ends of the part of said segment.” As discussed above, the Office Action suggests that the “part” is merely a pixel, which leaves one to wonder, among other things, what the “ends” of a pixel are.

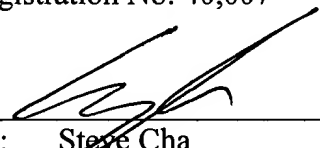
Claims 10 and 11 have been added to emphasize aspects of the invention, and each of the claims finds support in the specification (e.g., page 3, lines 32-33; page 4, lines 17-19, 30-31).

For all the foregoing reasons, it is respectfully submitted that all the present claims are patentable in view of the cited references. A Notice of Allowance is respectfully requested.

Respectfully submitted,

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Date: 7/14/04

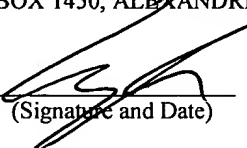

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